

Chapter 4

Air Defense Artillery Weapon Systems

SECTION-I

Introduction

4-1 Standards, Strategies, and Requirements.

a. This chapter provides weapons standards, training strategies and resource requirements for units equipped with MANPADS (Stinger), Avenger, M6 Linebacker, Bradley Stinger Fighting Vehicle (BSFV) and Patriot Air Defense Artillery weapon systems. The following training programs are specifically designed for each weapon system at different TRCs (Training Readiness Conditions). Each weapon's training program includes a standard and strategy that outlines the training sequence while also including suggested frequencies of live fires and use of training devices.

b. The objective of STRAC is to assist commanders in attaining and sustaining standards in accordance with their TRC and to ensure that combat proficiency is maintained in units. Weapon system specific training devices should be used to progressively aid individual and collective skill development in garrison or local training areas. The devices provide higher frequency training opportunities to sustain skill sets IAW FM 25-101's sustainment training band. The standard is assessed against the unit's ability to maintain published ARTEP standards for crew qualification and combat readiness with and without the use of live fire gunnery.

c. The training strategies in this chapter are based on exercises in current FMs and ARTEPs. The specifics of each exercise are further discussed in the applicable manual(s).

4-2 Training devices

a. General. Historically, Air Defense Artillery (ADA) relied on extensive use of actual equipment and full caliber ammunition to train crews, sections and platoons. Ammunition costs continue to escalate while at the same time technological advancements in training devices and simulators provide additional and less costly opportunities for gunnery training. Air Defense training strategies have incorporated these technological advances and now combine full-caliber ammunition live fires with device and simulator training programs.

b. Objective. Training devices aid sustainment training in garrison and local training areas. Devices enhance and sustain skills, and in some cases, may be the sole medium for training critical tasks.

c. Training Device list. The following training devices are an integral part of ADA training strategies.

(1) MQM 107 Streaker training target. The Streaker is a reusable turbojet-powered fixed-wing, subscale aerial target. It may be configured to provide training for all ADA weapon systems through the use of mission tailored ancillary equipment and augmentation and radar reflectors. The relatively high cost Streaker system is government owned and contractor operated and may be set up at most ranges where ADA weapons are fired.

(2) Remotely Piloted Vehicle Target System (RPVTS). The RPVTS is a relatively low cost target. The RPVT is a low altitude target flown at altitudes up to 2000ft Above Ground Level (AGL). The RPVTS is controlled by visual line-of-sight means using a radio-frequency, hand-held remote. It consists of two types of 1/5-scale propeller driven target aircraft configured to resemble the SU-25 and the MI-24 Hind-D

(GYROCOPTER). Both are highly maneuverable aerial targets capable of executing attack profiles. Each may be used with PGS and support Avenger, BSFV/M6 Linebacker gunnery, CAFAD and MANPADS/Stinger live-fire training missions. Various ancillary devices are added to the target to provide system versatility: Multiple Integrated Laser Engagement System (MILES); Air-To-Ground Engagement System (AGES); Precision Gunnery System (PGS) reflectors; Infrared (IR) Signature for missile engagements; and Doppler Scoring Device (Bullet Counter). The RPVTS is contractor operated and support scheduling is available through the Target Management Office of Simulation, Training and Instrumentation Command (STRICOM) only. Flight Service teams are dispatched to support Annual Service Practice/gunnery qualifications.

(3) Infrared Towed Target (IRTT). A high speed, subsonic, large size, low drag, low cost, infrared, aerial towed (by the MQM 107 Streaker) target that supports Air Defense infrared missile systems such as MANPADS/Stinger, Avenger and BSFV/M6 Linebacker.

(4) Multiple Integrated Laser Engagement System/Air-to-Ground Engagement System/Air Defense (MILES/AGES/ AD). The MILES/AGES/AD is available through local Training Support Centers (TSC). This training device provides a realistic training environment with real time hit/kill feedback for Avenger, MANPADS/Stinger and BSFV/M6 Linebacker weapon systems. The system duplicates all engagement tasks through the use of laser firings. MILES is an approved eye-safe training device.

(5) M67 Captive Flight Trainer (CFT). The CFT is a missile simulator used to train and/or qualify the Avenger and Linebacker gunner's tracking and engagement skills. The CFT is used in conjunction with 1/5 scale (RPVTS) targets and live targets to train and/or qualify engagement procedures. The CFT consists of a Stinger-RMP missile guidance assembly, a ballast launch tube and a container. The seeker and audio interface is the same as for the tactical missile, with electrical power and coolant provided through normal launcher sources.

(6) M60 Field Handling Trainer (FHT). The FHT is TOE equipment with the same size, weight, and external appearance as the Stinger weapon round. Soldiers use the FHT to practice the basic manual skills of weapon handling, operation, sighting, and ranging. The FHT also allows the gunner to practice mating and removing the grip stock, inserting and removing the battery coolant unit (BCU), and visually tracking aerial targets.

(7) M160 RMP Tracking Head Trainer (THT). The Stinger training set M160 is used to train the Stinger gunners in all tasks required for engagement of aircraft. THT replicates the size, weight, and appearance of a tactical Stinger weapon round. The M160 RMP THT provides training in improved IR/UV detection and has an improved performance indicator assembly to evaluate gunner performance.

(8) Stinger Troop Proficiency Trainer (STPT). The STPT is a computer-based training device that superimposes one or more independently moving aerial target images and terrain backgrounds onto the optical sight of Stinger weapon system. It provides the MANPADS/Stinger gunner with a visual representation of a realistic battlefield environment. STPT is used for both sustainment training and qualification.

(9) Avenger Table Top Trainer (AVG TTT). The Avenger Table Top Trainer (AVG TTT) is a computer-based training device consisting of a gunner's hand station, computer processor and a video display monitor. The trainer displays terrain and moving aircraft, allowing Avenger teams to track and engage aircraft with minimal training cost to the unit. It provides the Avenger gunner with a visual representation of a realistic battlefield environment. The Avenger Table Top Trainer (AVG TTT) is used to sustain Avenger crew members in engagement (alert/cue, search, detect, acquire, identify, track, engage) training scenarios.

(10) Avenger Instructional Conduct of Fire Trainer (ICOFT) / Unit Conduct of Fire Trainer (UCOFT). Avenger ICOFT/UCOFT is a simulator that develops Avenger gunner skills in search, acquisition, and engagement of hostile aircraft. The ICOFT trainer consists of six student stations and one instructor console. Each student station acts independently of each other, consequently, the same scenario can be sent to each student station or different scenario's can be sent with scenario's running at different points in time. The Instructor Station enables the instructor to initialize and control from one to six Student Stations acting independently or as a platoon.

(11) IFF Subsystem Training Set. This set evaluates gunner responses to simulated IFF tones. The set is available at platoon headquarters and consists of an interrogator simulator, simulator case, and the Stinger shipping/storage container. This item is used in place of the tactical interrogator for training purposes and is capable of producing three operating tones to the Stinger gunners.

(12) Unit Conduct of Fire Trainer (UCOFT). This is a gunnery simulator that provides training in critical gunnery and procedural tasks for BSFV/M6 Linebacker gunners and squad leaders (vehicle commander). It is used to sustain gunnery proficiency between periods of full-caliber live fire. The UCOFT consists of a crew training shelter that replicates the turret stations of a BSFV/M6 Linebacker, minus Standard Vehicle Mounted Launcher (SVML), an instructor/operator station and an integrated computer system capable of presenting an audiovisual replication of a combat environment. Computer-generated images are presented to the gunner and squad leader/commander through the optics of the BSFV/M6 Linebacker fire control system. COFT has the capability to train individual and collective operational procedures, target acquisition/identification, target engagement, and adjustment of fire using primary or alternate fire control equipment.

(13) Precision Gunnery System (PGS). This is a vehicle-appended gunnery-training device for the BSFV/M6 Linebacker that uses eye-safe lasers and retro-reflectors. PGS is interfaced with vehicle electronics and its operation is transparent to the crew. It is interoperable with MILES, remote target systems (RETS), thru-sight video (TSV), the Hoffman device, and area weapon effects signature simulator (ATWESS). This device supports precision gunnery, downgraded gunnery and force-on-force training with main gun, coax and TOW.

(14) M70-Series Guided Missile Simulator. This is a vehicle gunnery training device for the BSFV. The M70 training set is a crew portable trainer designed for use with the TOW 2 weapon system to provide gunner indoctrination, tracking instructions, practice, and qualification. This training set consists of a target set and a missile simulator round (MSR). The instructor's console is used to monitor and evaluate the response and tracking performance of the TOW senior gunner. The MSR is the same size, shape and approximate weight as the tactical TOW missile.

(15) Cartridge. 25-mm Dummy M28 (linked) (DODIC A967). The dummy round is a replica of the 25-mm live round. It is an inert assembly used for training tasks associated with loading and unloading the ready boxes, immediate action on the 25-mm, unloading and clearing the 25-mm gun and loading the 25-mm feeder.

(16) Missile Simulator Round (MSR). The MSR is a dummy TOW round casing that has been weighted to simulate the actual TOW round. The MSR is an inert assembly that comes in a crate the same as an actual round. It is a non-expendable major end item that may be requisitioned through the supply system. The MSR may be used to train tasks associated with upload of the BSFV, upload of the TOW launcher, applying immediate action on the TOW subsystem, removing a misfired TOW and unloading and stowing a TOW to its storage configuration.

(17) Scoring Augmentation. Scoring augmentation is available for installation on the MQM 107 IR towed target (IRTT), MQM 107 aerial gunnery towed target, MQM107 towed banner, and RPVTS. Immediate feedback of scoring data is available by detecting and counting bullets miss distance indications (MDI) that penetrate a predetermined RF field around the target. After Action Review (AAR) Reports are generated by the support contractor and provided to the unit immediately after completion of the mission. Scoring is contractor operated and support scheduling is available from Simulation, Training and Instrumentation Command (STRICOM) only.

(18) Thru-Sight Video (TSV). A vehicle-appended system that provides video and audio recording of gunnery or tactical engagement exercises in real time. It is used for vehicle gunnery training to provide an evaluation and critique of actual engagement sequences. The TSV system is transparent to the crew. It provides an immediate playback capability thru the use of an onboard monitor. The system also contains an after action review subsystem that allows evaluators to play back, freeze, and zoom on individual engagements.

(19) Patriot Troop Proficiency Trainer (TPT). The TPT is a software program used to train Information and Coordination Center (ICC) and Engagement Control Systems (ECS) operators. It is also used to evaluate and maintain proficiency levels of current operators. TPT can be programmed for battalion/battery exercise training.

(20) Patriot Live Aircraft Trainer (LAT). The LAT is a version of the tactical software modified to track live targets and simulate their engagement.

(21) Patriot Conduct of Fire Trainer (PCOFT). The PCOFT simulates the Patriot system displays, controls, communications and data processing systems at the operator and supervisory personnel positions of the Engagement Control Station and the Information and Coordination Center.

(22) Patriot Missile Round Trainer (MRT). The MRT is a training device that duplicates the external physical features of the missile canister and electronic characteristics of the guided missile. It consists of a canister with ballast permanently secured inside which approximates the tactical guided missile's weight and center of gravity. It enables transportation; handling and load/unload training without the hazards of handling live explosives.

(23) TRX-4A Radar Tow Target. A high speed, subsonic, low drag, low cost, radar aerial target which is towed by the MQM 107 Streaker. Wing mounted and launched from the MQM 107, the TRX-4A is used for radar systems such as Patriot.

SECTION-II

Training Programs

4-3 Development

Training programs have been developed for each TRC. The standard is stated at the beginning of each program. The individual training strategy is given first, followed by the training of the crew, section and/or platoon. With the use of dry-fire exercises, subcaliber exercises, use of training devices, and full caliber live-fire exercises, the unit will achieve proficiency. Ammunition resources for each TRC are discussed at the conclusion of each training program. The programs were developed on the assumption that training events will be evenly spaced throughout the training year. Resource availability (such as ranges) may allow a commander more live-fire

opportunities of shorter duration. In this case, not all teams/crews, sections and platoons in the battalion will train at each opportunity.

4-4 Purpose and objectives of the training programs

STRAC XXI

- a. Purpose. STRAC XXI develops strategies that support the manner in which unit's train today. Ammunition resources are allocated based on unit mission since one overarching training strategy does not fit all. The STRAC XXI strategy allows commanders to determine which crews validate and which crews qualify. The purpose of STRAC XXI is to allow commanders the flexibility to only validate crews that are already qualified on Gunnery Tables VII and VIII, thus providing additional rounds for collective gunnery tables (Tables IX & X). The validation track may be used for crews, which are currently qualified and will remain qualified until the next scheduled gunnery density. Conceivably, a validated crew's Gunnery Table VIII rounds could be allocated to a CALFEX or second Table X, at the discretion of the commander. New crews or crews which have not qualified Gunnery Table VIII would fire the traditional Qualification Tables.
- b. Commander Flexibility. STRAC XXI ensures commanders have the authority and flexibility for training design and decision-making. It maximizes the use of simulations to sustain baseline individual/crew proficiency and allows the commander to reallocate ammunition for collective training. STRAC XXI recognizes that units have individuals/crews with varying training needs and allows commanders several methods of qualifying/validating crews.
- c. Sustainment. STRAC XXI provides a method for attaining and sustaining weapons proficiency throughout the training year. STRAC XXI ensures that all crews and platoons in a battalion or squadron are adequately trained and able to sustain weapons proficiency.

4-5 Programs for MANPADS (Stinger)

- a. TRC A for MANPADS (Stinger)
 - (1) Standard.
 - (a) MANPADS Training Tables are specified in ARTEP 44-117-11-MTP, Appendix A. All MANPADS teams must conduct MANPADS Training Table III (Crew Member Certification), MANPADS Training Table VI (Battle/Crew Drill Certification), and MANPADS Training Table VII (Team Pre-Qualification) prior to proceeding to MANPADS Training Table VIII (Team Qualification). All assigned MANPADS teams (team leader and gunner) must successfully meet the standards for Training Table VII prior to executing Training Table VIII. Ninety percent of all assigned MANPADS teams (team leader and gunner) must be Training Table VIII qualified. To be qualified Training Table VIII, each MANPADS team (team leader and gunner) must correctly engage four out of five hostile target presentations using the Stinger Troop Proficiency Trainer (STPT) within the past six months. Stinger Troop Proficiency Trainer (STPT) will be used for both sustainment training and qualification.
 - (b) Ninety percent of all teams assigned must train to standard in all drills, as specified in Stinger Drills, ARTEP 44-117-11-DRILL, within the past 3 months and receive a Trained (T) on related collective tasks as specified in ARTEP 44-117-11-MTP, Chapter 5. MANPADS Training Tables are specified in ARTEP 44-117-11-MTP, Appendix A.

(2) Training strategy. Team and unit training strategies are given in Table 4-2. The total annual ATWESS cartridge requirements for Stinger are 50 cartridges per team. Recommended usage is 10 cartridges per team per LFX and battery level or higher level FTX. Table IX and X will be conducted annually.

b. TRC B for MANPADS (Stinger)

(1) Standard.

(a) MANPADS Training Tables are specified in ARTEP 44-117-11-MTP, Appendix A. All MANPADS teams must conduct MANPADS Training Table III (Crew Member Certification), MANPADS Training Table VI (Battle/Crew Drill Certification), and MANPADS Training Table VII (Team Pre-Qualification) prior to proceeding to MANPADS Training Table VIII (Team Qualification). All assigned MANPADS teams (team leader and gunner) must successfully meet the standards for Training Table VII prior to executing Training Table VIII. Eighty percent of all assigned MANPADS teams (team leader and gunner) must be Training Table VIII qualified. To be qualified Training Table VIII, each MANPADS team (team leader and gunner) must correctly engage four out of five hostile target presentations using the Stinger Troop Proficiency Trainer (STPT) within the past six months. Stinger Troop Proficiency Trainer (STPT) will be used for both sustainment training and qualification.

(b) Eighty percent of all teams assigned must train to standard in all drills, as specified in ARTEP 44-117-11-DRILL, every six months and receive a Trained (T) on related collective tasks as specified in ARTEP 44-117-11-MTP, Chapter 5. MANPADS Training Tables are specified in ARTEP 44-117-11-MTP, Appendix A.

(2) Training strategy. Team and unit training strategies are given in Table 4-3. The total annual ATWESS cartridge requirements for Stinger are 30 cartridges per team. Recommended use is 10 cartridges per team per CALFEX and battery level or higher level FTX. Table IX and X will be conducted within the training year.

c. TRC C for MANPADS (Stinger)

(1) Standard.

(a) MANPADS Training Tables are specified in ARTEP 44-117-11-MTP, Appendix A. All MANPADS teams must conduct MANPADS Training Table III (Crew Member Certification), MANPADS Training Table VI (Battle/Crew Drill Certification), and MANPADS Training Table VII (Team Pre-Qualification) prior to proceeding to MANPADS Training Table VIII (Team Qualification). All assigned MANPADS teams (team leader and gunner) must successfully meet the standards for Training Table VII prior to executing Training Table VIII. Seventy percent of all assigned MANPADS teams (team leader and gunner) must be Training Table VIII qualified. To be qualified Training Table VIII, each MANPADS team (team leader and gunner) must correctly engage four out of five hostile target presentations using the Stinger Troop Proficiency Trainer (STPT) within the past six months. Stinger Troop Proficiency Trainer (STPT) will be used for sustainment training and qualification.

(b) Seventy percent of all teams assigned must have trained to standard in all drills, as specified in ARTEP 44-117-11-DRILL, every six months and received a Trained (T) on related collective tasks as specified in ARTEP 44-117-11-MTP, Chapter 5. MANPADS Training Tables are specified in ARTEP 44-117-11-MTP, Appendix A.

(2) Training strategy. Team and unit training strategies are given in Table 4-4. The total annual ATWESS cartridge requirements for Stinger are 30 cartridges per team. Recommended use is 10 cartridges per team per CALFEX and battery level or higher level FTX. Table IX and X will be conducted within the training year.

4-6 Programs for Avenger

a. TRC A for Avenger

(1) Standards.

(a) Avenger Training Tables are specified in ARTEP 44-117-22-MTP, Appendix A. Semi-annually all Avenger teams must conduct Avenger Training Table III (Crew Member Certification), Avenger Training Table VI, (Battle/Crew Drill Certification), and Avenger Training Table VII (Team Pre-Qualification) prior to proceeding to Avenger Training Table VIII (Team Qualification). All assigned Avenger teams (team leader and gunner) must successfully meet the standards for Training Table VII prior to executing Training Table VIII. Ninety percent of all assigned Avenger teams (team leader and gunner) must be Training Table VIII qualified. To be qualified Training Table VIII each team must correctly engage five out of six hostile aerial targets using the 1/5th scale Remotely Piloted Vehicle Target System (RPVTS). The six aerial engagements consist of five Captive Flight Trainer (CFT) and one M3P MG. Additionally, Training Table VIII requires the successful engagement of three out of four ground targets using the M3P MG within the past 6 months. The engagements for the CFT and the M3P MG are contained in Table 4-8. The annual ammunition requirements for the M3P MG are contained in Table 4-9. Avenger Table Top Trainer (AVG TTT) will be used for sustainment training and to prepare for qualification.

(b) The Avenger team will fire ten of the thirteen engagement presentations listed in Table 4-8. The 10 engagements must consist of five aerial engagements with the Captive Flight Trainer and five M3P MG engagements. (One of the ten engagements will be under NBC conditions). The five M3P MG engagements consist of four ground and one aerial. The Avenger team leader will perform four of the ten engagements from the RCU. The four team leader engagements consist of two aerial engagements with the Captive Flight Trainer (CFT) and two ground engagements with the M3P MG. The Avenger gunner will perform six of the ten engagements from inside the turret. The six gunner engagements consist of four aerial engagements and two ground engagements. The two ground engagements are with the M3P MG. The four aerial engagements consist of three CFT engagements and one M3P MG engagement. The unit commander may decide which ten of the thirteen engagements the Avenger teams perform IAW the guidelines in the Avenger Training Tables. Each Avenger team will fire twenty-five rounds per M3P MG engagement. Each Avenger team will use fifty rounds to adjust or set the cycle rate of fire on the M3P MG from the rounds allocated per Practice/Qualification Tables and LFX IAW Table 4-9 and the Avenger Training Tables in ARTEP 44-117-22-MTP, Appendix A. Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles (CFT) and M3P MG live fire. Scoring is required for CFT and M3P live fire engagements. If scoring devices are not available, a subject matter expert must provide the assessment. Units will use available ground targets. Targets are considered suppressed with the M3P MG when the target area has been hit.

(c) Training Table IX and X will be conducted annually. Training Table IX (Platoon Operations Evaluation). The activities will be evaluated based upon principles of air defense employment contained in ARTEP 44-117-22-MTP. Upon completion of activities, the platoon leader and platoon sergeant consolidate data, access platoon tactical plans, and validate the platoon's defense and conduct an AAR for platoon members. This training event may encompass more than one training day. Training Table X, LFX (Annual Service

Practice), consists of selected Avenger teams engaging an aerial target with a Stinger missile and ground targets with the M3P MG.

(d) Ninety percent of all teams must have met the standards in all drills, as specified in ARTEP 44-117-21-DRILL, within the past three months and receive a Trained (T) on related collective tasks, as specified in ARTEP 44-117-22-MTP, Chapter 5. Avenger Training Tables are specified in ARTEP 44-117-22-MTP, Appendix A.

(2) Training strategy. Team and unit training strategies are given in Table 4-5. The total annual ATWESS cartridge requirements for Avenger are 50 cartridges per team. Recommended usage is 10 cartridges per team per LFX and battery level or higher level FTX. CFT and M3P MG engagements are contained in Table 4-8. M3P MG ammunition requirement is in Table 4-9. M3P MG (engagement strategy) is in ARTEP 44-117-22-MTP. (Coordinate with Target Management Office, STRICOM, for 1/5 scale RPVTS support).

***Note: The 1/5th scale (RPVTS) or its equivalent target is required to support the following tasks:**

- 1. Stinger Missiles allocated to all MACOMs under the Training Ammunition Management System (TAMIS) annually.**
- 2. Stinger Reliability Assessment Flight Test (RAFT) programs.**
- 3. The qualification of Avenger gunners using the captive flight trainer (CFT) on the Avenger system.**
- 4. The Avenger M3P MG engagements.**

b. TRC B for Avenger

(1) Standards.

(a) Avenger Training Tables are specified in ARTEP 44-117-22-MTP, Appendix A. During the training year, all Avenger teams must conduct Avenger Training Table III (Crew Member Certification), Avenger Training Table VI, (Battle/Crew Drill Certification), and Avenger Training Table VII (Team Pre-Qualification) prior to proceeding to Avenger Training Table VIII (Team Qualification). All assigned Avenger teams (team leader and gunner) must successfully meet the standards for Training Table VII prior to executing Training Table VIII. Eighty-five percent of all assigned Avenger teams (team leader and gunner) must be Training Table VIII qualified. To be qualified Training Table VIII, each team must correctly engage five out of six hostile aerial targets using the 1/5th scale Remotely Piloted Vehicle Target System (RPVTS).^{*} The six engagements consist of five Captive Flight Trainer (CFT) and one M3P MG. Additionally, Training Table VIII requires the successful engagement of three out of four ground targets using the M3P MG within the past 6 months. The engagements for the CFT and the M3P MG are contained in Table 4-8. The annual ammunition requirements for the M3P MG are contained in Table 4-9. Avenger Table Top Trainer (AVG TTT) will be used for sustainment training and to prepare for qualification.

(b) The Avenger team will fire ten of the thirteen engagement presentations listed in Table 4-8. The 10 engagements must consist of five aerial engagements with the Captive Flight Trainer and five M3P MG engagements. (One of the ten engagements will be under NBC conditions). The five M3P MG engagements consist of four ground and one aerial. The Avenger team leader will perform four of the ten engagements from the RCU. The four team leader engagements consist of two aerial engagements with the Captive Flight Trainer (CFT) and two ground engagements with the M3P MG. The Avenger gunner will perform six of the ten engagements from inside the turret. The six gunner engagements consist of four aerial engagements and two ground engagements. The two ground engagements are with the M3P MG. The four aerial engagements

consist of three CFT engagements and one M3P MG engagement. The unit commander may decide which ten of the thirteen engagements the Avenger teams perform IAW the guidelines in the Avenger Training Tables. Each Avenger team will fire twenty-five rounds per M3P MG engagement. Each Avenger team will use fifty rounds to adjust or set the cycle rate of fire on the M3P MG from the rounds allocated per Practice/Qualification Tables and LFX IAW Table 4-9 and the Avenger Training Tables in ARTEP 44-117-22-MTP, Appendix A. Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles (CFT) and M3P MG live fire. Scoring is required for CFT and M3P live fire engagements. If scoring devices are not available, a subject matter expert must provide the assessment. Units will use available ground targets. Targets are considered suppressed with the M3P MG when the target area has been hit.

(c) Training Table IX and X will be conducted within the training year. Training Table IX (Platoon Operations Evaluation). The activities will be evaluated based upon principles of air defense employment contained in ARTEP 44-117-22-MTP. Upon completion of activities, the platoon leader and platoon sergeant consolidate data, access platoon tactical plans, and validate the platoon's defense and conduct an AAR for platoon members. This training event may encompass more than one training day. Training Table X, LFX (Annual Service Practice), consists of selected Avenger teams engaging an aerial target with a Stinger missile and ground targets with the M3P MG.

(d) Eighty-five percent of all teams must have met the standards in all drills, as specified in ARTEP 44-117-21-DRILL, within the past three months and receive a Trained (T) on related collective tasks, as specified in ARTEP 44-117-22-MTP, Chapter 5. Avenger Training Tables are specified in ARTEP 44-117-22-MTP, Appendix A.

(2) Training strategy. Team and unit training strategies are given in Table 4-6. The total annual ATWESS cartridge requirements for Avenger are 50 cartridges per team. Recommended usage is 10 cartridges per team per LFX and battery level or higher level FTX. CFT and M3P MG engagements are contained in Table 4-8. M3P MG ammunition requirement is in Table 4-9. M3P MG (engagement strategy) is in ARTEP 44-117-22-MTP. (Coordinate with Target Management Office, STRICOM, for 1/5 scale RPVTS support).

***Note: The 1/5th scale (RPVTS) or its equivalent target is required to support the following tasks:**

- 1. Stinger Missiles allocated to all MACOMs under the Training Ammunition Management System (TAMIS) annually.**
- 2. Stinger Reliability Assessment Flight Test (RAFT) programs.**
- 3. The qualification of Avenger gunners using the captive flight trainer (CFT) on the Avenger system.**
- 4. The Avenger M3P MG engagements.**

c. TRC C for Avenger

(1) Standards.

(a) Avenger Training Tables are specified in ARTEP 44-117-22-MTP, Appendix A. During the training year, all Avenger teams must conduct Avenger Training Table III (Crew Member Certification), Avenger Training Table VI, (Battle/Crew Drill Certification), and Avenger Training Table VII (Team Pre-Qualification) prior to proceeding to Avenger Training Table VIII (Team Qualification). All assigned Avenger teams (team leader and gunner) must successfully meet the standards for Training Table VII prior to executing Training Table VIII. Eighty percent of all assigned Avenger teams (team leader and gunner) must be Training Table VIII qualified. To be qualified Training Table VIII, each team must correctly engage five out of six

hostile aerial targets using the 1/5th scale Remotely Piloted Vehicle Target System (RPVTS).^{*} The six engagements consist of five Captive Flight Trainer (CFT) and one M3P MG. Additionally, Training Table VIII requires the successful engagement of three out of four ground targets using the M3P MG within the past 6 months. The engagements for the CFT and the M3P MG are contained in Table 4-8. The annual ammunition requirements for the M3P MG are contained in Table 4-9. Avenger Table Top Trainer (AVG TTT) will be used for sustainment training and to prepare for qualification.

(b) The Avenger team will fire ten of the thirteen engagement presentations listed in Table 4-8. The 10 engagements must consist of five aerial engagements with the Captive Flight Trainer and five M3P MG engagements. (One of the ten engagements will be under NBC conditions). The five M3P MG engagements consist of four ground and one aerial. The Avenger team leader will perform four of the ten engagements from the RCU. The four team leader engagements consist of two aerial engagements with the Captive Flight Trainer (CFT) and two ground engagements with the M3P MG. The Avenger gunner will perform six of the ten engagements from inside the turret. The six gunner engagements consist of four aerial engagements and two ground engagements. The two ground engagements are with the M3P MG. The four aerial engagements consist of three CFT engagements and one M3P MG engagement. The unit commander may decide which ten of the thirteen engagements the Avenger teams perform IAW the guidelines in the Avenger Training Tables. Each Avenger team will fire twenty-five rounds per M3P MG engagement. Each Avenger team will use fifty rounds to adjust or set the cycle rate of fire on the M3P MG from the rounds allocated per Practice/Qualification Tables and LFX IAW Table 4-9 and the Avenger Training Tables in ARTEP 44-117-22-MTP, Appendix A. Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles (CFT) and M3P MG live fire. Scoring is required for CFT and M3P live fire engagements. If scoring devices are not available, a subject matter expert must provide the assessment. Units will use available ground targets. Targets are considered suppressed with the M3P MG when the target area has been hit.

(c) Training Table IX and X will be conducted within the training year. Training Table IX (Platoon Operations Evaluation). The activities will be evaluated based upon principles of air defense employment contained in ARTEP 44-117-22-MTP. Upon completion of activities, the platoon leader and platoon sergeant consolidate data, access platoon tactical plans, and validate the platoon's defense and conduct an AAR for platoon members. This training event may encompass more than one training day. Training Table X, LFX (Annual Service Practice), consists of selected Avenger teams engaging an aerial target with a Stinger missile and ground targets with the M3P MG.

(d) Eighty percent of all teams must have met the standards in all drills, as specified in ARTEP 44-117-21-DRILL, within the past three months and receive a Trained (T) on related collective tasks, as specified in ARTEP 44-117-22-MTP, Chapter 5. Avenger Training Tables are specified in ARTEP 44-117-22-MTP, Appendix A.

(2) Training strategy. Team and unit training strategies are given in Table 4-7. The total annual ATWESS cartridge requirements for Avenger are 50 cartridges per team. Recommended usage is 10 cartridges per team per LFX and battery level or higher level FTX. CFT and M3P MG engagements are contained in Table 4-8. M3P MG ammunition requirement is in Table 4-9. M3P MG (engagement strategy) is in ARTEP 44-117-22-MTP. (Coordinate with Target Management Office, STRICOM, for 1/5 scale RPVTS support).

***Note: The 1/5th scale (RPVTS) or its equivalent target is required to support the following tasks:**

- 1. Stinger Missiles allocated to all MACOMs under the Training Ammunition Management System (TAMIS) annually.**
- 2. Stinger Reliability Assessment Flight Test (RAFT) programs.**

3. **The qualification of Avenger gunners using the captive flight trainer (CFT) on the Avenger system.**
4. **The Avenger M3P MG engagements.**

4-7 Programs for the M6 Linebacker

TRC A Standard. All squads must conduct M6 Linebacker Table II, M6 Linebacker Crew Proficiency Course. All squads must certify on Table IV, Section Practice 1 prior to live firing. Eighty-five percent of the battalion's assigned squads must qualify on M6 Linebacker Table VIII within the past six months. All squads must qualify on M6 Linebacker Table VIII before conducting Advanced Gunnery Table X. Sixty-six percent of the battalion's assigned M6 Linebacker squads must have completed Stinger Crew Tables I-VIII as outlined in ARTEP 44-177-15-MTP before conducting M6 Linebacker Table X. Sixty-six percent of the battalion's assigned platoons must have qualified on Table X within the past twelve months. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire. The Linebacker training strategies are given in Tables 4-10 through 4-13 and are outlined in the Combined Arms Training Strategy Annex of ARTEP 44-177-15-MTP.

4-8 Programs for the M2A2 ODS and M2 Bradley Stinger Fighting Vehicle.

a. TRC A Standard. (M2A2 ODS) All platoon leaders must certify on Bradley Table II, Bradley Crew Proficiency Course prior to live firing. All platoon leaders must certify on Linebacker Table IV, Section Practice 1 prior to live firing. Eighty-five percent of the battalions assigned platoon leaders must have qualified on Bradley Table VIII within the past six months. All squads must qualify on Bradley Table VIII before conducting Advanced Gunnery Table X. Sixty-six percent of the battalion's assigned platoons must have qualified on Table X within the past twelve months. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire. The Linebacker training strategies are given in Tables 4-14 through 4-17 and are outlined in the Combined Arms Training Strategy Annex of ARTEP 44-177-15-MTP.

b. TRC A Standard. BSFV (M2A2). All squads must certify on Bradley Table II, Bradley Crew Proficiency Course prior to live firing. All squads must certify on Bradley Table IVa, Section Practice 1 prior to live firing. Eighty-five percent of the battalion's assigned squads must qualify on Bradley Table VIII within the past six months. All squads must qualify on Bradley Table VIII before conducting Bradley Advanced Gunnery Table Xa. Sixty-six percent of the battalion's assigned BSFV squads must have completed Stinger Crew Tables I-VIII as outlined in ARTEP 44-177-14-MTP before attempting Table Xa. Sixty-six percent of the battalion's assigned platoons must have qualified on Bradley Table Xa within the past twelve months. The BSFV training strategies are given in Tables 4-18 and 4-19, and are outlined in the Combined Arms Training Strategy Annex of ARTEP 44-177-14-MTP.

c. TRC B Standard. All squads must certify on Bradley Table II, Bradley Crew Proficiency Course prior to live firing. Eighty-five percent of the battalions assigned squads must qualify on Bradley Table VIII within the past twelve months. Sixty-six percent of the battalion's assigned BSFV squads must have completed Stinger Crew Tables I-VIII as outlined in ARTEP 44-177-14-MTP. The BSFV training strategy is given in Table 4-20 and is outlined in the Combined Arms Training Strategy Annex of ARTEP 44-177-14-MTP.

4-9 Programs for the Patriot

- a. TRC A

- (1) Standard.

(a) All assigned crews will train to standard in either ARTEP 44-635-MTP (ADA Battalion, Patriot) or ARTEP 44-637-30-MTP (ADA Battery, Patriot) Appendix E and ARTEP drills (ARTEP 44-635-11-DRILL (EPP/AMG), ARTEP 44-635-12-DRILL (ICC/EPU II/CRG), ARTEP 44-635-13-DRILL (ECS/RS), ARTEP 44-635-14-DRILL (LS/Missile Reload).

(b) Seventy-five percent (75%) of all TCO/TCA (battery) or TD/TDA (battalion) battle crews assigned must have qualified in the Air Battle Management qualifications (Troop Proficiency Trainer (TPT), Crew Drill, Heavy Raid Scenario, Point and Area Defense against ABTs and TBMs) with an eighty percent (80%) or better asset protection, as measured by the computer and SMEs within the past twelve (12) months. The Launcher Platoon must have qualified two (2) Missile Reload crews within the past twelve (12) months.

(c) Each firing battery must have qualified in the Patriot March Order and Emplacement crew drills (IAW ARTEP 44-635-11-DRILL (EPP/AMG), ARTEP 44-635-13-DRILL (ECS/RS), and ARTEP 44-635-14-DRILL (LS/MSL Reload)) within the past twelve (12) months. The Headquarters and Headquarters Battery must have qualified in the Patriot March Order and Emplacement crew drill (IAW ARTEP 44-635-12-DRILL (ICC/EPU II/CRG) within the past twelve (12) months.

(2) Training Strategy.

(a) The Combined Arms Training Strategy (CATS) for Patriot is outlined in Appendix E of ARTEP 44-637-30-MTP (ADA Battery, Patriot) and ARTEP 44-635-MTP (ADA Battalion, Patriot).

(b) Crew training strategy is given in Table 4-21. Unit training strategy is given in Table 4-22.

(c) Ammunition requirement is based on total system validation with one missile per battery every other year when available.

b. TRC C

(1) Standard.

(a) All assigned crews will train to standard in either ARTEP 44-635-MTP (ADA Battalion, Patriot) or ARTEP 44-637-30-MTP (ADA Battery, Patriot) Appendix E and ARTEP drills (ARTEP 44-635-11-DRILL (EPP/AMG), ARTEP 44-635-12-DRILL (ICC/EPU II/CRG), ARTEP 44-635-13-DRILL (ECS/RS), ARTEP 44-635-14-DRILL (LS/Missile Reload).

(b) Fifty percent (50%) of all TCO/TCA (battery) or TD/TDA (battalion) battle crews assigned must have qualified in the Air Battle Management qualifications (Troop Proficiency Trainer (TPT), Crew Drill, Heavy Raid Scenario, Point and Area Defense against ABTs and TBMs) with an eighty percent (80%) or better asset protection, as measured by the computer and SMEs within the past twelve (12) months. The Launcher Platoon must have qualified two (2) Missile Reload crews within the past twelve (12) months.

(c) Each firing battery must have qualified in the Patriot March Order and Emplacement crew drills (IAW ARTEP 44-635-11-DRILL (EPP/AMG), ARTEP 44-635-13-DRILL (ECS/RS), and ARTEP 44-635-14-DRILL (LS/MSL Reload)) within the past twelve (12) months. The Headquarters and Headquarters Battery must have qualified in the Patriot March Order and Emplacement crew drill (IAW ARTEP 44-635-12-DRILL (ICC/EPU II/CRG) within the past twelve (12) months.

(2) Training Strategy.

(a) The Combined Arms Training Strategy (CATS) for Patriot is outlined in Appendix E of ARTEP 44-637-30-MTP (ADA Battery, Patriot) and ARTEP 44-635-MTP (ADA Battalion, Patriot).

(b) Crew training strategy is given in Table 4-23. Unit training strategy is given in Table 4-24.

(c) Ammunition requirement is based on total system validation with one missile per battery every other year when available.

| Table 4-1. Air Defense Weapon Systems Training Index | | | |
|---|--|------------------|--|
| Weapon | DODIC | Paragraph | Table |
| Branch Specific Weapons | | | |
| MANPADS | PL90/PL93/L367 | 4-5 | 4-2, 4-3, 4-4 |
| Avenger | PL90/PL93/A557/Z598 L367/A561 | 4-6 | 4-5, 4-6, 4-7, 4-8, 4-9 |
| M6 Linebacker | A940/A976, A068/A146 A131/PL90/PL93/L367/A111 | 4-7 | 4-10, 4-11, 4-12, 4-13 |
| ODS/BSFV | A940/A976, A068/A146 A131/PL90/PL93/L367/A111 | 4-8 | 4-14, 4-15, 4-16, 4-17, 4-18, 4-19, 4-20 |
| Patriot | PA49 | 4-9 | 4-21, 4-22, 4-23, 4-24 |
| Non - Air Defense Artillery Weapons (See chapters 5) | | | |

| Table 4-2 Annual MANPADS Training Strategy (TRC A) | | | | | |
|---|--------|-----------|--------|--------------------|-------|
| Event | Level | Frequency | ATWESS | How | DODIC |
| Battle Drills ^{1,2,4} | SEC/TM | 24 | | M60 FHT | |
| Tracking Practice ^{1,2,4} | SEC/TM | 24 | | M160 RMP THT/ STPT | |
| FTX ³ | SEC/TM | 4 | 0 | | L367 |
| | PLT | 4 | 0 | | L367 |
| | BTRY | 2 | 15 | | L367 |
| | BN | 2 | 15 | | L367 |
| LFX ^{4,5} | SEC | 1 | 10 | | PL93 |
| CALFEX | PLT | 1 | 10 | | L367 |

NOTES:

- Standards are in ARTEP 44-117-11-DRILL.
- Units will use the Stinger Troop Proficiency Trainer (STPT) for Training Table VIII qualification.
- One FTX will be externally evaluated per ARTEP 44-117-30-MTP, ARTEP 44-117-11-MTP, and unit METL. Commanders have the prerogative to mix events.
- When Stinger missiles are available selected teams will fire live Stinger training missiles while all other available section members will track and engage with the Tracking Head Trainer (THT).
- Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles live fire.

| Table 4-3 Annual MANPADS Training Strategy (TRC B) | | | | | |
|---|--------|-----------|--------|--------------------|-------|
| Event | Level | Frequency | ATWESS | How | DODIC |
| Battle Drills ^{1,2,4} | SEC/TM | 18 | | M60 FHT | |
| Tracking Practice ^{1,2,4} | SEC/TM | 18 | | M160 RMP THT/ STPT | |
| | | | | | |
| FTX ³ | PLT | 1 | 0 | | L367 |
| | BTRY | 1 | 10 | | L367 |
| | BN | 1 | 10 | | L367 |
| LFX ^{4,5} | SEC | 1 | 10 | | PL93 |

NOTES:

1. Standards are in ARTEP 44-117-11-DRILL.
2. Units will use the Stinger Troop Proficiency Trainer (STPT) for Training Table VIII qualification.
3. One FTX will be externally evaluated per ARTEP 44-117-30-MTP, ARTEP 44-117-11-MTP, and unit METL. Commanders have the prerogative to mix events.
4. When Stinger missiles are available selected teams will fire live Stinger training missiles while all other available section members will track and engage with the Tracking Head Trainer (THT).
5. Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles live fire.

| Table 4-4 Annual MANPADS Training Strategy (TRC C) | | | | | |
|---|--------|-----------|--------|--------------------|-------|
| Event | Level | Frequency | ATWESS | How | DODIC |
| Battle Drills ^{1,2,4} | SEC/TM | 12 | | M60 FHT | |
| Tracking Practice ^{1,2,4} | SEC/TM | 12 | | M160 RMP THT/ STPT | |
| | | | | | |
| FTX ³ | PLT | 1 | 0 | | L367 |
| | BTRY | 1 | 10 | | L367 |
| | BN | 1 | 10 | | L367 |
| LFX ^{4,5} | SEC | 1 | 10 | | PL93 |

NOTES:

1. Standards are in ARTEP 44-117-11-DRILL.
2. Units will use the Stinger Troop Proficiency Trainer (STPT) for Training Table VIII qualification.
3. One FTX will be externally evaluated per ARTEP 44-117-30-MTP, ARTEP 44-117-11-MTP, and unit METL. Commanders have the prerogative to mix events.
4. When Stinger missiles are available selected teams will fire live Stinger training missiles while all other available section members will track and engage with the Tracking Head Trainer (THT).
5. Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles live fire.

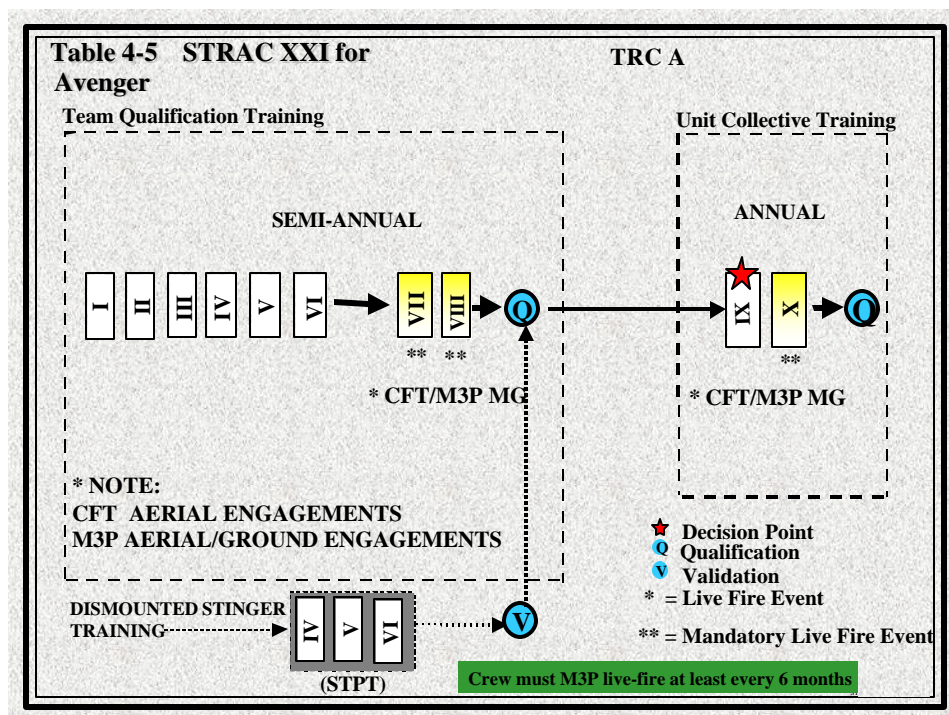


Table 4-5 depicts the STRAC XXI strategy that supports Avenger training. It maximizes the use of simulations to sustain baseline individual/team proficiency and allows the commander to reallocate ammunition for collective training. STRAC XXI recognizes that units have individuals/teams with varying training needs and allows commanders several methods of qualifying/validating teams.

Decision point. Commander selects top teams that will go to Training Table X and fire live Stinger round.

| Table 4-5 Avenger Training Strategy (TRC A) | | | | | |
|--|--------|-----------|--|-----------|--------|
| Event | LEVEL | Frequency | Equipment | DODIC | ATWESS |
| Battle Drills ^{1,2} | SEC/TM | 24 | Tactical Equipment, CFT, FHT | | |
| Tracking Practice ^{1,2} | SEC/TM | 24 | Tactical Equipment, AVG TTT, STPT, CFT | | |
| FTX ³ | Plt | 4 | | L367 | 0 |
| | Btry | 4 | | L367 | 20 |
| | Bn | 2 | | L367 | 20 |
| LFX ⁴ | Sec | 1 | | PL93/A557 | 10 |

NOTES:

- Standards are in ARTEP 44-117-21-DRILL.
- Units will use the 1/5 scale (RPVTS) or its equivalent for team qualification using Captive Flight Trainer (CFT).
- One FTX will be externally evaluated per ARTEP 44-117-31-MTP, ARTEP 44-117-22-MTP, and unit METL.
- Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles and the M3P live fire. Scoring is required for M3P live fire, if scoring devices are not available a subject matter expert must provide the assessment.

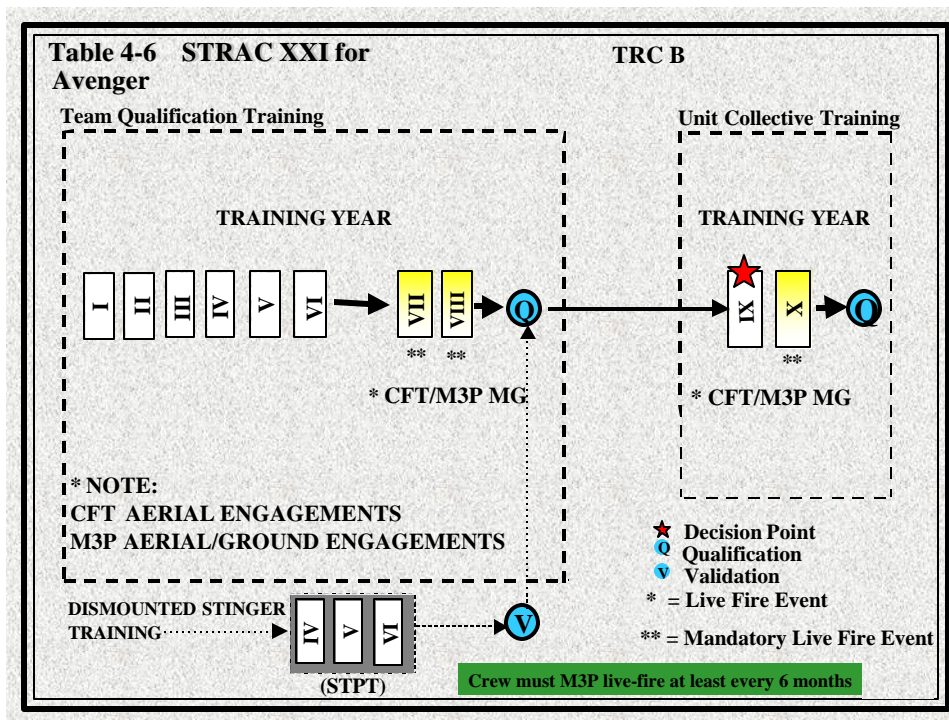


Table 4-6 depicts the STRAC XXI strategy that supports Avenger training. It maximizes the use of simulations to sustain baseline individual/team proficiency and allows the commander to reallocate ammunition for collective training. STRAC XXI recognizes that units have individuals/teams with varying training needs and allows commanders several methods of qualifying/validating teams.

Decision point. Commander selects top teams that will go to Training Table X and fire live Stinger round.

| Table 4-6 Avenger Training Strategy (TRC B) | | | | | |
|--|--------|-----------|--|-----------|--------|
| Event | LEVEL | Frequency | Equipment | DODIC | ATWESS |
| Battle Drills ^{1,2} | SEC/TM | 18 | Tactical Equipment CFT, FHT | | |
| Tracking Practice ^{1,2} | SEC/TM | 18 | Tactical Equipment AVG TTT, STPT, CFT | | |
| FTX ³ | Plt | 1 | | L367 | 0 |
| | Btry | 1 | | L367 | 20 |
| | Bn | 1 | | L367 | 20 |
| LFX ⁴ | Sec | 1 | | PL93/A557 | 10 |

NOTES:

- Standards are in ARTEP 44-117-21-DRILL.
- Units will use the 1/5 scale (RPVTS) or its equivalent for team qualification using Captive Flight Trainer (CFT).
- One FTX will be externally evaluated per ARTEP 44-117-31-MTP, ARTEP 44-117-22-MTP, and unit METL.
- Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles and the M3P live fire. Scoring is required for M3P live fire, if scoring devices are not available a subject matter expert must provide the assessment.

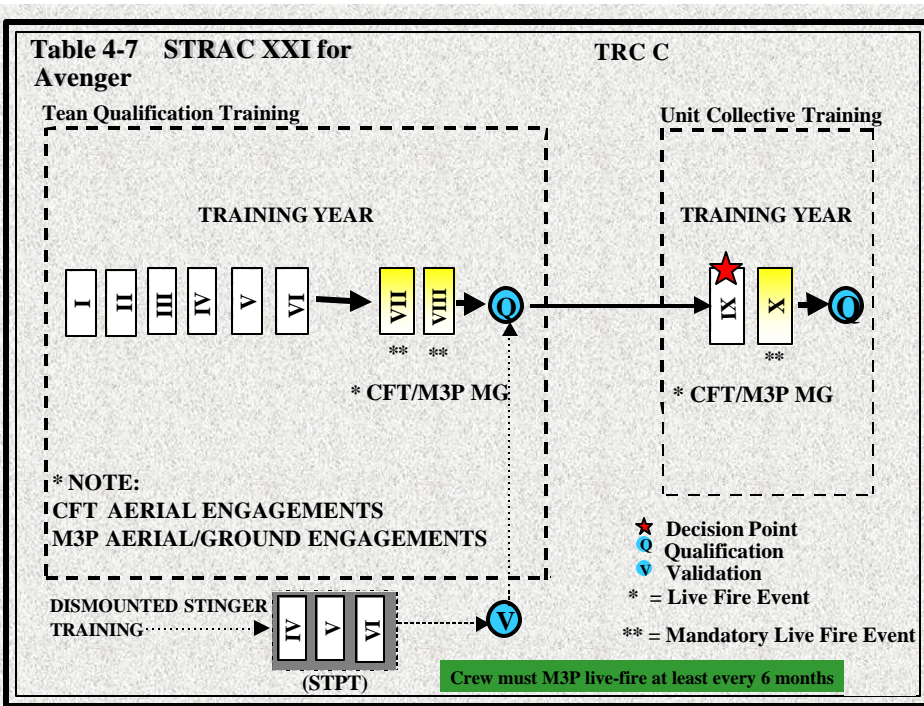


Table 4-7 depicts the STRAC XXI strategy that supports Avenger training. It maximizes the use of simulations to sustain baseline individual/team proficiency and allows the commander to reallocate ammunition for collective training. STRAC XXI recognizes that units have individuals/teams with varying training needs and allows commanders several methods of qualifying/validating teams.

Decision point. Commander selects top teams that will go to Training Table X and fire live Stinger round.

| Table 4-7 Avenger Training Strategy (TRC C) | | | | | |
|--|--------|-----------|--|-----------|--------|
| Event | LEVEL | Frequency | How | DODIC | ATWESS |
| Battle Drills ^{1,2} | SEC/TM | 12 | Tactical Equipment CFT, FHT | | |
| Tracking Practice ^{1,2} | SEC/TM | 12 | Tactical Equipment AVG TTT, STPT, CFT | | |
| EOCCT | SEC/TM | 2 | | | |
| FTX ³ | Plt | 1 | | L367 | 0 |
| | Btry | 1 | | L367 | 20 |
| | Bn | 1 | | L367 | 20 |
| LFX ⁴ | Sec | 1 | | PL93/A557 | 10 |

NOTES:

- Standards are in ARTEP 44-117-21-DRILL.
- Units will use the 1/5 scale (RPVTS) or its equivalent for team qualification using Captive Flight Trainer (CFT).
- One FTX will be externally evaluated per ARTEP 44-117-31-MTP, ARTEP 44-117-22-MTP, and unit METL.
- Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles and the M3P live fire. Scoring is required for M3P live fire, if scoring devices are not available a subject matter expert must provide the assessment.

Table 4-8

Avenger M3P MG Practice¹/Qualification¹/LFX Engagements

| Engagement | Target | Course | Range KM | Standards | Rounds per Event |
|-------------------|---------------|----------------------------------|-----------------|-------------------|-------------------------|
| 1 | Ground | Static | .4-.6K | Hit target | 25 Mix |
| 2 | Ground | Static | .6-.9K | Hit target | 25 Mix |
| 3 | Ground | Moving or static | .4-.6K | Suppress RPG-team | 25 Mix |
| 4 | Ground | Moving or static | .6-.9K | Hit target | 25 Mix |
| 5 | Aerial | Pop-up helicopter | .4-.6K | Hit target | 25 Mix |
| 6 | Aerial | Crossing, diving, inbound | .2-.8K | Hit target | 25 Mix |
| 7 | Aerial | Climbing and crossing | .2-.8K | Destroy target | 1 CFT |
| 8 | Aerial | Crossing, inbound | .2-.8K | Destroy target | 1 CFT/25 Mix |
| 9 | Aerial | Crossing level | .2-.8K | Destroy target | 1 CFT |
| 10 | Aerial | Crossing, outbound | .2-.8K | Destroy target | 1 CFT |
| 11 | Aerial | Crossing, diving | .2-.8K | Hit target | 25 Mix |
| 12 | Aerial | Incoming | .2-.8K | Destroy target | 1 CFT |
| 13 | Aerial | Incoming, pop-up helicopter, NBC | .4-.6K | Hit target | 25 Mix |

NOTES:

1. TRC A. units will fire twice annually. TRC B/C units will fire twice per training year.

Table 4-9
Annual Ammunition Requirements and Training Strategy for Avenger M3P MG

| | Rounds per Event | | Rounds per Event | | Rounds per Event | | ATWESS | DODIC |
|--|--------------------------------------|----------------------|--|----------------------|--|----------------------------|--------|-------------------|
| | Practice ^{1,3} Table VII | | Qualification ^{1,3} Table VIII | | Live Fire Exercise ^{3,4,5} Table X | | | |
| Engagements | SL | G | SL | G | SL | G | | |
| 1 ^{2,3} | 25 Mix | | 50 Mix | | 25 Mix | | | |
| 2 ^{2,3} | 25 Mix | | 50 Mix | | 25 Mix | | | |
| 3 ^{2,3} | | 25 Mix | | 50 Mix | | 25 Mix | | |
| 4 ^{2,3} | | 25 Mix | | 50 Mix | | 25 Mix | | |
| 5 ^{2,3} | | 50 Mix | | 50 Mix | | 25 Mix | | |
| 6 ⁴ | CFT | | CFT | | | | | |
| 7 ⁴ | CFT | | CFT | | | | | |
| 8 ⁴ | | CFT | | CFT | | | | |
| 9 ⁴ | | CFT | | CFT | | | | |
| 10 ⁴ | | CFT | | CFT | | | | |
| Cycle Rate of Fire | | 50 Mix | | 50 Mix | | 100 Mix | | |
| Plt FTX | | | | | | | 0 | L367 |
| Btry FTX | | | | | | | 20 | L367 |
| Bn ARTEP | | 100 Blanks | | 100 Blanks | | | 20 | L367 |
| LFX ^{3,4,5} | | | | | | Stinger missile | 10 | PL93 A557/A598 |
| Semi-annual Total | 50 Mix | 100 Mix 50 Mix | 100 Mix | 150 Mix 50 Mix | | | | |
| Semi-annual Total | 50 Mix | 100 Mix 50 Mix | 100 Mix | 150 Mix 50 Mix | | | | |
| Annual Total | 100 Mix | 300 Mix 100 Blank | 200 Mix | 400 Mix 100 Blank | 50 Mix | Stinger missile/ 75 Mix | 50 | |
| Total Round per Avenger: 1125 Mix/200 Blank/1 Stinger missile ⁵ | | | | | | | | |

NOTES:

1. TRC A units will fire twice annually. TRC B/C units will fire twice per training year.
2. Avenger Gunnery Tables VII, VIII and LFX, ARTEP 44-117-21-MTP, Appendix A.
3. Units will use the 1/5 scale (RPVTS) or its equivalent as an aerial target for Stinger missiles and M3P live fire. Scoring is required for M3P live fire, if scoring devices are not available a subject matter expert must provide the scoring.
4. Captive Flight Trainer (CFT) and the 1/5 scale RPVTS, or its equivalent aerial target, is required for this engagement.
5. One team will fire while all other available section members track with CFT (TRC A - one missile per four teams per year, TRC B/C - one missile per platoon per training year).

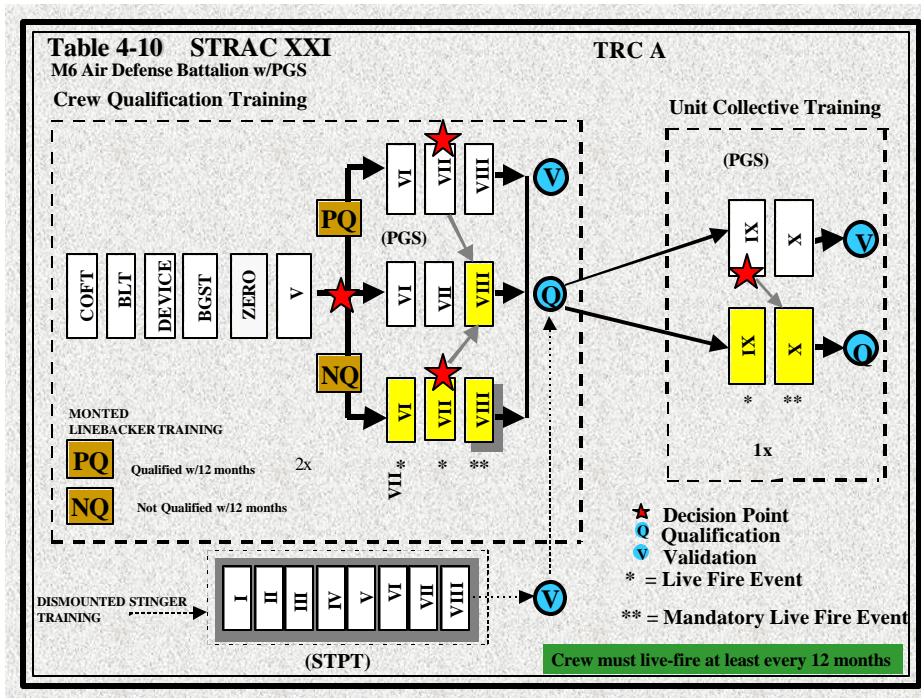


Table 4-10 depicts how battalion commanders have the flexibility to qualify and validate M6/Linebacker crews using a mixture of live and virtual domains. These options will provide commanders the needed flexibility to execute training strategies regardless of current environmental issues or deployments. Commanders may decide only to use the ammunition into the collective training, but will lose the flexibility to shuffle ammunition into the collective training arena.

Decision points allow commanders the flexibility to train/retrain crews based on their demonstrated ability. **Commanders are authorized** to keep ammunition that was allocated by STRAC, but not fired by crews who validated in the virtual domain. **Commanders are authorized** to use this ammunition to execute collective tasks not previously resourced.

Annual Ammunition Requirements Training Strategy for the M6 Linebacker (TRC A)
Three Battery Battalion
Table 4-10

| | | | | | Blank | Subcal | 7.62mm | M21 | ATWESS |
|------------------------------|-------|------|--------|-------|--------|--------|--------|---------|----------------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62mm | 7.62T | Coax | Hoffman | |
| PGT ¹ | | 12 | | | | | | | |
| BGST ¹ | | 2 | | | | | | | |
| COFT ² | | 12 | | | | | | | |
| BLT ² | | 12 | | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | | |
| Aerial Tracking ⁴ | | 2 | | | | | | | |
| Table V A/B | 24 | 2 | | | | 160 | | | |
| Subtotal #3 | | | | | | 7680 | | | |
| Zero | 24 | 4 | 3 | 2 | | | 50 | | |
| Subtotal #4 | | | 288 | 192 | | | 4800 | | |
| Table VI A/B | 24 | 2 | 24 | 52 | | | 300 | 12 | |
| Subtotal #5 | | | 1152 | 2496 | | | 14400 | 576 | |
| Table VII A/B | 24 | 2 | 56 | 48 | | | 250 | 14 | |
| Subtotal #6 | | | 2688 | 2304 | | | 12000 | 672 | |
| Table VIII A/B | 24 | 2 | 48 | 64 | | | 300 | 15 | |
| Subtotal #7 | | | 2304 | 3072 | | | 14400 | 720 | |
| Table IX | 24 | 1 | | 60 | | | 200 | 9 | 1 ³ |
| Subtotal #8 | | | | 1440 | | | 4800 | 216 | 24 |
| Table X | 24 | 1 | | 60 | | | 200 | 9 | 1 ³ |
| Subtotal #9 | | | | 1440 | | | 4800 | 216 | 24 |
| Plt FTX | | 4 | | | | | | | |
| Btry FTX | 24 | 4 | | | 200 | | | | |
| Subtotal Btry FTX | | | | | 19200 | | | | |
| Bn FTX | 24 | 2 | | | 200 | | | | |
| Subtotal BN FTX | | | | | 9600 | | | | |
| Rnds Per Veh: | | | 268 | 456 | 1200 | | 2300 | 100 | 2 |
| Total Per Bn: | | | 6432 | 10944 | 28800 | 7680 | 55200 | 2400 | 48 |
| DODIC | | | A940 | A976 | A111 | A146 | A131 | L602 | PL93/L36 7 |

NOTES:

1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST includes SVML training and is conducted prior to live fire density.
2. COFT and BLT training is recommended at 4 hours each, per crew per month.
3. When Stinger missiles are available selected crews (1 for every four) will fire live Stinger training missiles while all other available crew members will track and engage with the Captive Flight Trainer (CFT).
4. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.
5. Breakdown: 24 Linebackers and 6 M2A2's assigned. See table 4-14 for M2A2 requirements

Annual Ammunition Requirements Training Strategy for the M6 Linebacker (TRC A)
Two Battery Battalion
Table 4-11

| | | | | | Blank | Subcal | 7.62mm | M21 | ATWESS |
|------------------------------|-------|------|--------|------|--------|--------|--------|---------|----------------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62mm | 7.62T | Coax | Hoffman | |
| PGT ¹ | | 12 | | | | | | | |
| BGST ¹ | | 2 | | | | | | | |
| COFT ² | | 12 | | | | | | | |
| BLT ² | | 12 | | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | | |
| Aerial Tracking ⁴ | | 2 | | | | | | | |
| Table V A/B | 16 | 2 | | | | 160 | | | |
| Subtotal #3 | | | | | | 5120 | | | |
| Zero | 16 | 4 | 3 | 2 | | | 50 | | |
| Subtotal #4 | | | 192 | 128 | | | 3200 | | |
| Table VI A/B | 16 | 2 | 24 | 52 | | | 300 | 12 | |
| Subtotal #5 | | | 768 | 1664 | | | 9600 | 384 | |
| Table VII A/B | 16 | 2 | 56 | 48 | | | 250 | 14 | |
| Subtotal #6 | | | 1792 | 1536 | | | 8000 | 448 | |
| Table VIII A/B | 16 | 2 | 48 | 64 | | | 300 | 15 | |
| Subtotal #7 | | | 1536 | 2048 | | | 9600 | 480 | |
| Table IX | 16 | 1 | | 60 | | | 200 | 9 | 1 ³ |
| Subtotal #8 | | | | 960 | | | 3200 | 144 | 16 |
| Table X | 16 | 1 | | 60 | | | 200 | 9 | 1 ³ |
| Subtotal #9 | | | | 960 | | | 3200 | 144 | 16 |
| Plt FTX | | 4 | | | | | | | |
| Btry FTX | 16 | 4 | | | 200 | | | | |
| Subtotal Btry FTX | | | | | 12800 | | | | |
| Bn FTX | 16 | 2 | | | 200 | | | | |
| Subtotal BN FTX | | | | | 6400 | | | | |
| Rnds Per Veh: | | | 268 | 456 | 1200 | 320 | 2300 | 100 | 2 |
| Total Per Bn: | | | 6432 | 7296 | 19200 | 5120 | 36800 | 1600 | 32 |
| DODIC | | | A940 | A976 | A111 | A146 | A131 | L602 | PL93/L36 7 |

NOTES:

1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST includes SVML training and is conducted prior to live fire density.
2. COFT and BLT training is recommended at 4 hours each, per crew per month.
3. When Stinger missiles are available selected crews will fire live Stinger training missiles while all other available crewmembers will track with the Captive Flight Trainer (CFT).
4. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.
5. Breakdown: 16 Linebackers and 4 M2A2's assigned. See table 4-15 for M2A2 requirements

Annual Ammunition Requirements Training Strategy for the M6 Linebacker (TRC A)
ACR Linebacker Battery

Table 4-12

| | | | | | Blank | Subcal | 7.62mm | M21 | ATWESS |
|------------------------------|-------|------|--------|------|--------|--------|--------|---------|----------------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62mm | 7.62T | Coax | Hoffman | |
| PGT ¹ | | 12 | | | | | | | |
| BGST ¹ | | 2 | | | | | | | |
| COFT ² | | 12 | | | | | | | |
| BLT ² | | 12 | | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | | |
| Aerial Tracking ⁴ | | 2 | | | | | | | |
| Table V A/B | 12 | 2 | | | | 160 | | | |
| Subtotal #3 | | | | | | 3840 | | | |
| Zero | 12 | 4 | 3 | 2 | | | 50 | | |
| Subtotal #4 | | | 144 | 96 | | | 2400 | | |
| Table VI A/B | 12 | 2 | 24 | 52 | | | 300 | 12 | |
| Subtotal #5 | | | 576 | 1248 | | | 7200 | 288 | |
| Table VII A/B | 12 | 2 | 56 | 48 | | | 250 | 14 | |
| Subtotal #6 | | | 1344 | 1152 | | | 6000 | 336 | |
| Table VIII A/B | 12 | 2 | 48 | 64 | | | 300 | 15 | |
| Subtotal #7 | | | 1152 | 1536 | | | 7200 | 360 | |
| Table IX | 12 | 1 | | 60 | | | 200 | 9 | 1 ³ |
| Subtotal #8 | | | | 720 | | | 2400 | 108 | 12 |
| Table X | 12 | 1 | | 60 | | | 200 | 9 | 1 ³ |
| Subtotal #9 | | | | 720 | | | 2400 | 108 | 12 |
| Plt FTX | | 4 | | | | | | | |
| Btry FTX | 12 | 4 | | | 200 | | | | |
| Subtotal Btry FTX | | | | | 9600 | | | | |
| Sqdn FTX | 12 | 2 | | | 200 | | | | |
| Subtotal Sqdn FTX | | | | | 4800 | | | | |
| Rnds Per Veh: | | | 268 | 456 | 1200 | 320 | 2300 | 100 | 2 |
| Total Per ACR: | | | 3216 | 5472 | 14400 | 3840 | 27600 | 1200 | 24 |
| DODIC | | | A940 | A976 | A111 | A146 | A131 | L602 | PL93/L36 7 |

NOTES:

1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST includes SVM L training and is conducted prior to live fire density.
2. COFT and BLT training is recommended at 4 hours each, per crew per month.
3. When Stinger missiles are available selected crews will fire live Stinger training missiles while all other available crew members will track and engage with the Captive Flight Trainer (CFT).
4. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.
5. Breakdown: 12 Linebackers and 3 M2A2's assigned. See table 4-16 for M2A2 requirements

Annual Ammunition Requirements Training Strategy for the M6 Linebacker (TRC A)
Separate Battery
Table 4-13

| | | | | | Blank | Subcal | 7.62mm | M21 | ATWESS |
|------------------------------|-------|------|--------|------|--------|--------|--------|---------|----------------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62mm | 7.62T | Coax | Hoffman | |
| PGT ¹ | | 12 | | | | | | | |
| BGST ¹ | | 2 | | | | | | | |
| COFT ² | | 12 | | | | | | | |
| BLT ² | | 12 | | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | | |
| Aerial Tracking ⁴ | | 2 | | | | | | | |
| Table V A/B | 8 | 2 | | | | 160 | | | |
| Subtotal #3 | | | | | | 2560 | | | |
| Zero | 8 | 4 | 3 | 2 | | | 50 | | |
| Subtotal #4 | | | 96 | 64 | | | 1600 | | |
| Table VI A/B | 8 | 2 | 24 | 52 | | | 300 | 12 | |
| Subtotal #5 | | | 384 | 832 | | | 4800 | 192 | |
| Table VII A/B | 8 | 2 | 56 | 48 | | | 250 | 14 | |
| Subtotal #6 | | | 896 | 768 | | | 4000 | 224 | |
| Table VIII A/B | 8 | 2 | 48 | 64 | | | 300 | 15 | |
| Subtotal #7 | | | 768 | 1024 | | | 4800 | 240 | |
| Table IX | 8 | 1 | | 60 | | | 200 | 9 | 1 ³ |
| Subtotal #8 | | | | 480 | | | 1600 | 72 | 8 |
| Table X | 8 | 1 | | 60 | | | 200 | 9 | 1 ³ |
| Subtotal #9 | | | | 480 | | | 1600 | 72 | 8 |
| Plt FTX | | 4 | | | | | | | |
| Btry FTX | 8 | 4 | | | 200 | | | | |
| Subtotal Btry FTX | | | | | 6400 | | | | |
| Bn FTX | 8 | 2 | | | 200 | | | | |
| Subtotal BN FTX | | | | | 3200 | | | | |
| Rnds Per Veh: | | | 268 | 456 | 1200 | 320 | 2300 | 100 | 2 |
| Total Per Btry: | | | 2144 | 3648 | 9600 | 2560 | 18400 | 800 | 16 |
| DODIC | | | A940 | A976 | A111 | A146 | A131 | L602 | PL93/L36 7 |

NOTES:

1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST includes SVML training and is conducted prior to live fire density.
2. COFT and BLT training is recommended at 4 hours each, per crew per month.
3. When Stinger missiles are available selected crews will fire live Stinger training missiles while all other available crew members will track and engage with the Captive Flight Trainer (CFT).
4. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.
5. Breakdown: 8 Linebackers and 2 M2A2's assigned. See table 4-17 for M2A2 requirements

Annual Ammunition Requirements Training Strategy for the M2A2 (ODS)

(TRC A)

Three Battery Linebacker Battalion

Table 4-14

| | | | | | Subcal | 7.62mm | Blank | M21 |
|------------------------------|-------|------|--------|------|--------|--------|--------|---------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62T | Coax | 7.62mm | Hoffman |
| PGT ¹ | | 12 | | | | | | |
| BGST ¹ | | 2 | | | | | | |
| COFT ² | | 12 | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | |
| Aerial Tracking ³ | | 1 | | | | | | |
| Table V A/B | 6 | 2 | | | 160 | | | |
| Subtotal #3 | | | | | 1920 | | | |
| Zero | 6 | 4 | 3 | 2 | | 50 | | |
| Subtotal #4 | | | 72 | 48 | | 1200 | | |
| Table VI A/B | 6 | 2 | 32 | 24 | | 350 | | 14 |
| Subtotal #5 | | | 384 | 288 | | 4200 | | 168 |
| Table VII A/B | 6 | 2 | 56 | 24 | | 400 | | 18 |
| Subtotal #6 | | | 672 | 288 | | 4800 | | 216 |
| Table VIII A/B | 6 | 2 | 48 | 48 | | 450 | | 21 |
| Subtotal #7 | | | 576 | 576 | | 5400 | | 252 |
| Table IX | 6 | 1 | | 80 | | 50 | | 8 |
| Subtotal #8 | | | | 480 | | 300 | | 48 |
| Table X | 6 | 1 | | 80 | | 50 | | 8 |
| Subtotal #9 | | | | 480 | | 300 | | 48 |
| Plt FTX | | 4 | | | | | | |
| Btry FTX | 6 | 4 | | | | | 200 | |
| Subtotal Btry FTX | | | | | | | 4800 | |
| Bn FTX | 6 | 2 | | | | | 200 | |
| Subtotal BN FTX | | | | | | | 2400 | |
| Rnds Per Veh: | | | 284 | 360 | 320 | 2700 | 1200 | 122 |
| Total Per Bn: | | | 1704 | 2160 | 1920 | 16200 | 7200 | 732 |
| DODIC | | | A940 | A976 | A146 | A131 | A111 | L602 |

NOTES:

1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST is conducted prior to live fire density.
2. COFT is recommended at 4 hours each, per crew per month.
3. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.

Annual Ammunition Requirements Training Strategy for the M2A2 (ODS) (TRC A)
Two Battery Linebacker Battalion
Table 4-15

| | | | | | Subcal | 7.62m m | Blank | M21 |
|------------------------------|-------|------|--------|------|--------|------------|--------|---------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62T | Coax | 7.62mm | Hoffman |
| PGT ¹ | | 12 | | | | | | |
| BGST ¹ | | 2 | | | | | | |
| COFT ² | | 12 | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | |
| Aerial Tracking ³ | | 1 | | | | | | |
| Table V A/B | 4 | 2 | | | 160 | | | |
| Subtotal #3 | | | | | 1280 | | | |
| Zero | 4 | 4 | 3 | 2 | | 50 | | |
| Subtotal #4 | | | 48 | 32 | | 800 | | |
| Table VI A/B | 4 | 2 | 32 | 24 | | 350 | | 14 |
| Subtotal #5 | | | 256 | 192 | | 2800 | | 112 |
| Table VII A/B | 4 | 2 | 56 | 24 | | 400 | | 18 |
| Subtotal #6 | | | 448 | 192 | | 3200 | | 144 |
| Table VIII A/B | 4 | 2 | 48 | 48 | | 450 | | 21 |
| Subtotal #7 | | | 384 | 384 | | 3600 | | 168 |
| Table IX | 4 | 1 | | 80 | | 50 | | 8 |
| Subtotal #8 | | | | 320 | | 200 | | 32 |
| Table X | 4 | 1 | | 80 | | 50 | | 8 |
| Subtotal #9 | | | | 320 | | 200 | | 32 |
| Plt FTX | | 4 | | | | | | |
| Btry FTX | 4 | 4 | | | | | 200 | |
| Subtotal Btry FTX | | | | | | | 3200 | |
| Bn FTX | 4 | 2 | | | | | 200 | |
| Subtotal BN FTX | | | | | | | 1600 | |
| Rnds Per Veh: | | | 284 | 360 | 320 | 2700 | 1200 | 122 |
| Total Per Bn: | | | 1136 | 1440 | 1280 | 10800 | 4800 | 488 |
| DODIC | | | A940 | A976 | A146 | A131 | A111 | L602 |

NOTES:

- 1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST is conducted prior to live fire density.**
- 2. COFT is recommended at 4 hours each, per crew per month.**
- 3. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.**

Annual Ammunition Requirements Training Strategy for the M2A2 (ODS) (TRC A)
ACR Linebacker Battery

Table 4-16

| | | | | | Subcal | 7.62mm | Blank | M21 |
|------------------------------|-------|------|--------|------|--------|--------|--------|---------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62T | Coax | 7.62mm | Hoffman |
| PGT ¹ | | 12 | | | | | | |
| BGST ¹ | | 2 | | | | | | |
| COFT ² | | 12 | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | |
| Aerial Tracking ³ | | 1 | | | | | | |
| Table V A/B | 3 | 2 | | | 160 | | | |
| Subtotal #3 | | | | | 960 | | | |
| Zero | 3 | 4 | 3 | 2 | | 50 | | |
| Subtotal #4 | | | 36 | 24 | | 600 | | |
| Table VI A/B | 3 | 2 | 32 | 24 | | 350 | | 14 |
| Subtotal #5 | | | 192 | 144 | | 2100 | | 84 |
| Table VII A/B | 3 | 2 | 56 | 24 | | 400 | | 18 |
| Subtotal #6 | | | 336 | 144 | | 2400 | | 108 |
| Table VIII A/B | 3 | 2 | 48 | 48 | | 450 | | 21 |
| Subtotal #7 | | | 288 | 288 | | 2700 | | 126 |
| Table IX | 3 | 1 | | 80 | | 50 | | 8 |
| Subtotal #8 | | | | 240 | | 150 | | 24 |
| Table X | 3 | 1 | | 80 | | 50 | | 8 |
| Subtotal #9 | | | | 240 | | 150 | | 24 |
| Plt FTX | | 4 | | | | | | |
| Btry FTX | 3 | 4 | | | | | 200 | |
| Subtotal Btry FTX | | | | | | | 2400 | |
| Sqdn FTX | 3 | 2 | | | | | 200 | |
| Subtotal Sqdn FTX | | | | | | | 1200 | |
| Rnds Per Veh: | | | 284 | 360 | 320 | 2700 | 1200 | 122 |
| Total Per ACR: | | | 852 | 1080 | 960 | 8100 | 3600 | 366 |
| DODIC | | | A940 | A976 | A146 | A131 | A111 | L602 |

NOTES:

- 1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST is conducted prior to live fire density.**
- 2. COFT is recommended at 4 hours each, per crew per month.**
- 3. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.**

Annual Ammunition Requirements Training Strategy for the M2A2 (ODS) (TRC A)

Separate Linebacker Battery

Table 4-17

| | | | | | Subcal | 7.62mm | Blank | M21 |
|------------------------------|-------|------|--------|------|--------|--------|--------|---------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62T | Coax | 7.62mm | Hoffman |
| PGT ¹ | | 12 | | | | | | |
| BGST ¹ | | 2 | | | | | | |
| COFT ² | | 12 | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | |
| Aerial Tracking ³ | | 1 | | | | | | |
| Table V A/B | 2 | 2 | | | 160 | | | |
| Subtotal #3 | | | | | 640 | | | |
| Zero | 2 | 4 | 3 | 2 | | 50 | | |
| Subtotal #4 | | | 24 | 16 | | 400 | | |
| Table VI A/B | 2 | 2 | 32 | 24 | | 350 | | 14 |
| Subtotal #5 | | | 128 | 96 | | 1400 | | 56 |
| Table VII A/B | 2 | 2 | 56 | 24 | | 400 | | 18 |
| Subtotal #6 | | | 224 | 96 | | 1600 | | 72 |
| Table VIII A/B | 2 | 2 | 48 | 48 | | 450 | | 21 |
| Subtotal #7 | | | 192 | 192 | | 1800 | | 84 |
| Table IX | 2 | 1 | | 80 | | 50 | | 8 |
| Subtotal #8 | | | | 160 | | 100 | | 16 |
| Table X | 2 | 1 | | 80 | | 50 | | 8 |
| Subtotal #9 | | | | 160 | | 100 | | 16 |
| Plt FTX | | 4 | | | | | | |
| Btry FTX | 2 | 4 | | | | | 200 | |
| Subtotal Btry FTX | | | | | | | 1600 | |
| Bn FTX | 2 | 2 | | | | | 200 | |
| Subtotal Bn FTX | | | | | | | 800 | |
| Rnds Per Veh: | | | 284 | 360 | 320 | 2700 | 1200 | 122 |
| Total Per Btry: | | | 568 | 720 | 620 | 5400 | 2400 | 244 |
| DODIC | | | A940 | A976 | A146 | A131 | A111 | L602 |

NOTES:

1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST is conducted prior to live fire density.
2. COFT is recommended at 4 hours each, per crew per month.
3. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.

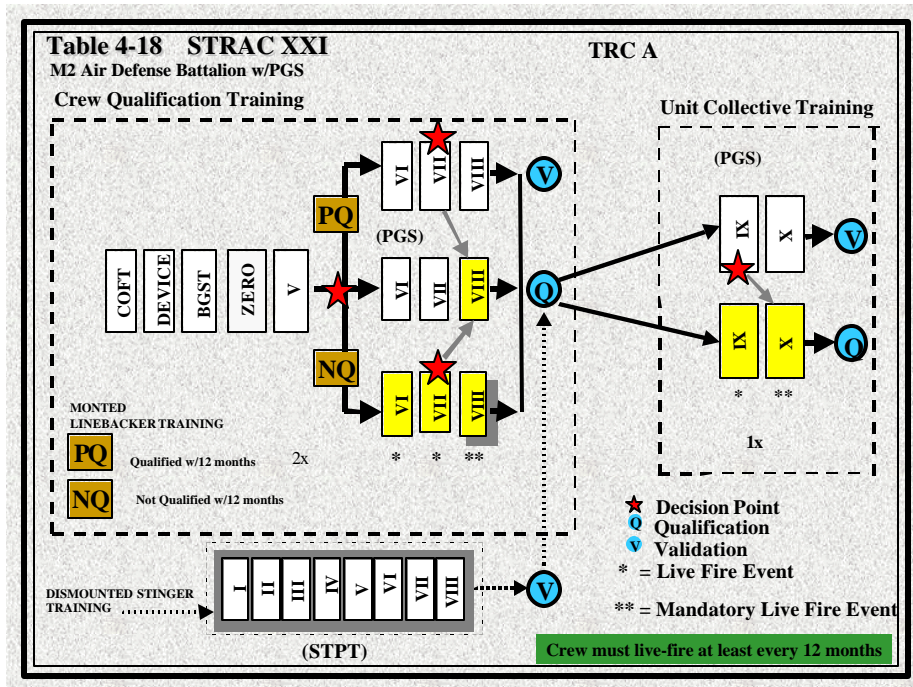


Table 4-18 depicts how battalion commanders have the flexibility to qualify and validate BSFV/Bradley crews using a mixture of live and virtual domains. These options will provide commanders the needed flexibility to execute training strategies regardless of current environmental issues or deployments. Commanders may decide only to use the ammunition into the collective training, but will lose the flexibility to shuffle ammunition into the collective training arena.

Decision points allow commanders the flexibility to train/retrain crews based on their demonstrated ability.

Commanders are authorized to keep ammunition that was allocated by STRAC, but not fired by crews who validated in the virtual domain. **Commanders are authorized** to use this ammunition to execute collective tasks not previously resourced.

Annual Ammunition Requirements Training Strategy for the M2 Bradley Stinger Fighting Vehicle
Two Battery Battalion (TRC A)
Table 4-18

| Table | Crews | Freq | TPDS-T | TPT | Subcal 7.62T | 7.62mm Coax | Blank 7.62mm | M21 Hoffman | ATWESS |
|------------------------------|-------|------|--------|------|-----------------|----------------|-----------------|----------------|----------------|
| PGT ¹ | | 12 | | | | | | | |
| BGST ¹ | | 2 | | | | | | | |
| COFT ² | | 12 | | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | | |
| Aerial Tracking ⁴ | | 1 | | | | | | | |
| Table V A/B | 20 | 2 | | | 160 | | | | |
| Subtotal #3 | | | | | 6400 | | | | |
| Zero | 20 | 4 | 3 | 2 | | 50 | | | |
| Subtotal #4 | | | 240 | 160 | | 4000 | | | |
| Table VI A/B | 20 | 2 | 32 | 24 | | 350 | | 14 | |
| Subtotal #5 | | | 1280 | 960 | | 14000 | | 560 | |
| Table VII A/B | 20 | 2 | 56 | 24 | | 400 | | 18 | |
| Subtotal #6 | | | 2240 | 960 | | 16000 | | 720 | |
| Table VIII A/B | 20 | 2 | 48 | 48 | | 450 | | 21 | |
| Subtotal #7 | | | 1920 | 1920 | | 18000 | | 840 | |
| Table IXa | 20 | 1 | | 80 | | 50 | | 8 | 3 ³ |
| Subtotal #8 | | | | 1600 | | 1000 | | 140 | 48 |
| Table Xa | 20 | 1 | | 80 | | 50 | | 8 | 3 ³ |
| Subtotal #9 | | | | 1600 | | 1000 | | 140 | 48 |
| Plt FTX | | 4 | | | | | | | |
| Btry FTX | 20 | 4 | | | | | 200 | | |
| Subtotal Btry FTX | | | | | | | 16000 | | |
| Bn FTX | 20 | 2 | | | | | 200 | | |
| Subtotal Bn FTX | | | | | | | 8000 | | |
| Rnds Per Veh: | | | 284 | 360 | 320 | 2700 | 1200 | 120 | 6 |
| Total Per Bn: | | | 5680 | 7200 | 6400 | 54000 | 24000 | 2400 | 96 |
| DODIC | | | A940 | A976 | A146 | A131 | A111 | L602 | PL93/L36 7 |

NOTES:

1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST is conducted prior to live fire density.
2. COFT is recommended at 4 hours each, per crew per month.
3. When Stinger missiles are available selected crews will fire live Stinger training missiles while all other available crew members will track and engage with the Tracking Head Trainer (THT). Resource for 16 M2 BSFV's per battalion.
4. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.

Annual Ammunition Requirements Training Strategy for the M2 Bradley Stinger Fighting Vehicle
Separate Battery (TRC A)

Table 4-19

| | | | | | Subcal | 7.62mm | Blank | M21 | ATWESS |
|------------------------------|-------|------|--------|------|--------|--------|--------|---------|----------------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62T | Coax | 7.62mm | Hoffman | |
| PGT ¹ | | 12 | | | | | | | |
| BGST ¹ | | 2 | | | | | | | |
| COFT ² | | 12 | | | | | | | |
| Battle/Crew Drills | | 24 | | | | | | | |
| Aerial Tracking ⁴ | | 1 | | | | | | | |
| Table V A/B | 10 | 2 | | | 160 | | | | |
| Subtotal #3 | | | | | 3200 | | | | |
| Zero | 10 | 4 | 3 | 2 | | 50 | | | |
| Subtotal #4 | | | 120 | 80 | | 2000 | | | |
| Table VI A/B | 10 | 2 | 32 | 24 | | 350 | | 14 | |
| Subtotal #5 | | | 640 | 480 | | 7000 | | 280 | |
| Table VII A/B | 10 | 2 | 56 | 24 | | 400 | | 18 | |
| Subtotal #6 | | | 1120 | 480 | | 8000 | | 360 | |
| Table VIII A/B | 10 | 2 | 48 | 48 | | 450 | | 21 | |
| Subtotal #7 | | | 960 | 960 | | 9000 | | 420 | |
| Table IXa | 10 | 1 | | 80 | | 50 | | 8 | 3 ³ |
| Subtotal #8 | | | | 800 | | 500 | | 70 | 24 |
| Table Xa | 10 | 1 | | 80 | | 50 | | 8 | 3 ³ |
| Subtotal #9 | | | | 800 | | 500 | | 70 | 24 |
| Plt FTX | | 4 | | | | | | | |
| Btry FTX | 10 | 4 | | | | | 200 | | |
| Subtotal Btry FTX | | | | | | | 8000 | | |
| Bn FTX | 10 | 2 | | | | | 200 | | |
| Subtotal Bn FTX | | | | | | | 4000 | | |
| Rnds Per Veh: | | | 284 | 360 | 320 | 2700 | 1200 | 120 | 6 |
| Total Per Btry: | | | 2840 | 3600 | 3200 | 27000 | 12000 | 1200 | 48 |
| DODIC | | | A940 | A976 | A146 | A131 | A111 | L602 | PL93/L367 |

NOTES:

- 1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST is conducted prior to live fire density.**
- 2. COFT is recommended at 4 hours each, per crew per month.**
- 3. When Stinger missiles are available selected crews will fire live Stinger training missiles while all other available crew members will track and engage with the Tracking Head Trainer (THT). Resource for 8 M2 BSFV's per battery.**
- 4. Units will use the 1/5 scale (RPVTS) or its equivalent as the exclusive aerial target for live fire.**

**Annual Ammunition Requirements Training Strategy for the M2 Bradley Stinger Fighting Vehicle NG
Separate Battery/ACR (TRC B) ³**

Table 4-20

| | | | | | Subcal | 7.62mm | Blank | M21 |
|--------------------|-------|------|--------|------|--------|--------|--------|---------|
| Table | Crews | Freq | TPDS-T | TPT | 7.62T | Coax | 7.62mm | Hoffman |
| PGT ¹ | | 6 | | | | | | |
| BGST ¹ | | 1 | | | | | | |
| COFT ² | | 6 | | | | | | |
| Battle/Crew Drills | | 12 | | | | | | |
| Table V A/B | 10 | 1 | | | 160 | | | |
| Subtotal #3 | | | | | 1600 | | | |
| Zero | 10 | 1 | 3 | 2 | | 50 | | |
| Subtotal #4 | | | 30 | 20 | | 500 | | |
| Table VI A/B | 10 | 1 | 32 | 24 | | 350 | | 14 |
| Subtotal #5 | | | 320 | 240 | | 3500 | | 140 |
| Table VII A/B | 10 | 1 | 56 | 24 | | 400 | | 18 |
| Subtotal #6 | | | 560 | 240 | | 4000 | | 180 |
| Table VIII A/B | 10 | 1 | 48 | 48 | | 450 | | 21 |
| Subtotal #7 | | | 480 | 480 | | 4500 | | 210 |
| Plt FTX | | 2 | | | | | | |
| Btry FTX | 10 | 2 | | | | | 200 | |
| Subtotal Btry FTX | | | | | | | 4000 | |
| Bn FTX | 10 | 2 | | | | | 200 | |
| Subtotal Bn FTX | | | | | | | 4000 | |
| Rnds Per Veh: | | | 139 | 98 | 160 | 1250 | 800 | 53 |
| Total Per Btry: | | | 1390 | 980 | 1600 | 12500 | 8000 | 530 |
| DODIC | | | A940 | A976 | A146 | A131 | A111 | L602 |

NOTES:

- 1. Preliminary Gunnery Training (PGT) is conducted monthly. BGST is conducted prior to live fire density.**
- 2. COFT is recommended at 4 hours each, per crew per month.**
- 3. Table IXa & Xa conducted after mobilization. See TRC A.**

Table 4-21
Annual Patriot Crew Training Strategy (TRC A)

| Event | (CATS Table) | Frequency | How |
|---------------------------|------------------|-----------|---|
| Air Battle Training | III | 104 | Tactical Equipment/Training Devices/Classroom |
| | V ¹ | 22 | TPT or PCOFT |
| | VII ¹ | 22 | TPT or PCOFT |
| | IX | 8 | Tactical Equipment |
| Crew Drills | II ¹ | 104 | Tactical Equipment |
| | VI ¹ | 40 | Tactical Equipment |
| | VII ¹ | 18 | Tactical Equipment |
| | X | 14 | Tactical Equipment |
| | XI | 6 | Tactical Equipment |
| Missile Reload Crew Drill | V | 21 | Tactical Equipment/ MRT |
| | IV | 7 | Tactical Equipment/ MRT |

NOTES:

1. Refer to Patriot Gunnery Table in ARTEP 44-635-MTP (Battery) or ARTEP 44-637-30-MTP (Battalion) Appendix E.

Table 4-22
Annual Patriot Unit Training Strategy (TRC A)

| Event | Frequency | Level | DODIC |
|--------|----------------|-------------------|-------|
| TEWT | 4 | Bn | |
| MAPEX | 4 | Btry | |
| ADX | 4 | Bn | |
| CPX | 4 | Bn | |
| STX | 4 | Btry/Bn | |
| DEPEX | 2 | Bn | |
| FTX | 6 | Btry | |
| | 2 ³ | Bn | |
| EXEVAL | 1 ¹ | Btry | |
| | 1 ¹ | Bn | |
| CTX | 1 | Bn | |
| LFX | 1 | Btry ² | PA49 |

NOTES:

1. May be conducted in lieu of FTX.
2. As a minimum, Each battery fires a missile once every two (2) years.
3. A Battalion FTX may be substituted with one (1) or two (2) Battery FTXs for a possible total of eight (8) Battery FTXs.

Table 4-23**Annual Patriot Crew Training Strategy (TRC C)**

| Event | (CATS Table) | Frequency | How |
|---------------------------|------------------|-----------|-------------------------|
| Air Battle Training | III | 52 | Tactical Equipment |
| | V ¹ | 15 | TPT |
| | VII ¹ | 15 | TPT |
| | V ¹ | 15 | PCOFT, when available |
| Crew Drills | II ¹ | 80 | Tactical Equipment |
| | VI ¹ | 80 | Tactical Equipment |
| | VII ¹ | 80 | Tactical Equipment |
| Missile Reload Crew Drill | I | 26 | Tactical Equipment/ MRT |
| | IV | 26 | Tactical Equipment/ MRT |

NOTES:

1. Refer to Patriot Gunnery Table in ARTEP 44-635-MTP (Battery) or ARTEP 44-637-30-MTP (Battalion) Appendix E.

Table 4-24**Annual Patriot Unit Training Strategy (TRC C)**

| Event | Frequency | Level | DODIC |
|-------------------------|----------------|---------|-------|
| Patriot Proficiency Tng | 26 | Section | |
| TEWT | 2 | Btry | |
| MAPEX | 2 | Btry | |
| ADX | 6 | Btry | |
| CPX | 2 | Btry | |
| STX | 2 | Btry | |
| DEPEX | 1 | Bn | |
| FTX | 2 | Btry | |
| | 1 | Bn | |
| EXEVAL | 1 ¹ | Btry | |
| | 1 ¹ | Bn | |
| CTX | 1 ¹ | Bn | |
| LFX | 1 | Btry | PA49 |

NOTES:

1. May be conducted in lieu of FTX.
2. As a minimum, Each battery fires a missile once every two (2) years.

Addition to Glossary

ANCD

Automated Net Control Device

AVG TTT

Avenger Table Top Trainer

BELRF

Bradley Eye-Safe Laser Range Finder

BLT

Bradley Linebacker Trainer

CAFAD

Combined Arms for Air Defense

CDT

Control Display Terminal

EPLRS

Enhanced Position Location and Reporting System

GPS

Global Positioning System

HTU

Handheld Terminal Unit

ISU

Integrated Sight Unit

PLGR

Precision Lightweight GPS Receiver

RAFT

Stinger Reliability Assessment Flight Test

RPG

Rocket Propelled Grenade

SHTU

Simplified Handheld Terminal Unit

SME

Subject Matter Expert

STRICOM

Simulation, Training and Instrumentation Command

SVML

Standard Vehicle Mounted Launcher

TACNAV

Tactical Navigation

TAMIS

Training Ammunition Management System

TTT

Table Top Trainer

UAV

Unmanned Aerial Vehicle